CIVIL MILITARY INTEGRATION

Government/Industry Partnership
Commercial Packaging Example

Mr. Shawn R. Hawkins
ODUSD - Acquisition Reform

21 June 99

CMI and DoD Packaging

- Civil Military Integration (CMI), eliminating the distinction between doing business with the Government and other buyers, is critical to meeting our future military, economic, and policy objectives

- The CMI goal for DoD Packaging is to eliminate military unique packaging processes and routinely apply commercial practices even for items entering the military distribution system

What Are We Doing Today?

- **MIL-STD-2073-1C, Standard Practice for Military Packaging:**
  - Requirements are applied by procurement activities to provide adequate protection for items entering the military distribution system for most severe environments
  - Where severe environmental conditions or long-storage times are not encountered, these requirements may be over-specified

In this case Commercial Standards can and should be used even for items entering the military distribution system

Why Are We Doing Packaging Pilot?

To Improve Partnership with Industry:

- Optimal use of commercial packaging within the military distribution system

Desired Outcomes:

- Simplify requirements, lower mutual costs and identify opportunities for DoD to apply commercial packaging for specific applications
- Achieve greater integration of commercial/military processes
- Improve open communication and understanding of packaging requirements between the Military Services, DLA/DCMC and Industry

Pilot Program Processes

- **GE and Allied Signal will modify current packaging processes to eliminate military unique processes and routinely apply commercial packaging practices to all military items**
- **For items entering the military distribution system, as DoD did previously in Mil-Specs and Standards reform, GE and Allied Signal will apply best commercial packaging practices except in rare circumstances**

A Comprehensive block change clause language will be put in place to assure product integrity and GE and Allied Signal accountability

Pilot Program Metrics

- Performance metrics have been established to track packaging discrepancy reports and cost reductions achieved
- Special project codes have been assigned to evaluate the use of commercial packaging shipped from specific GE (3AI) and AlliedSignal (3AJ) plants through the military distribution system

The OSD Pilot Program Consulting Group (PPCG) will provide metrics oversight, lessons learned and reporting

Balanced Scorecard

Commercial Packaging Pilot Program

- **Quality Monitoring (Better)**
- **Packaging Cycle Time (Faster)**
- **Cost Avoidance (Cheaper)**
- **Minimization of Plastics**
- **Innovation**

- Cover Page

Commercial Packaging Pilot Program Implementation Plan Generation

- More than 20 DoD “empowered” Military Service/Agency and 2 Industry representatives endorsed the Implementation Plan
- Commitment to being an advocate within the respective organizations for the Commercial Packaging Pilot Program
- Commercial Packaging Pilot Program officially launched on 3 May 99

Commercial Packaging Pilot Program Implementation Plan Generation

- Two-day session facilitated by Motorola University and Leap Technology
- Culmination of more than 15 hours covering team building, generation of goals, objectives, roles and responsibilities, metrics and a balanced scorecard
- Intensive risk/issue resolution
- Total consensus achieved

Summary

This three-year Packaging Pilot Program is an example of how the Department of Defense has partnered with industry to improve operations.

Together industry and government can provide the leadership to accelerate change and free up scarce resources to provide better support to our customers! Your commitment is required!

Backup

Balanced Scorecard

Commercial Packaging Pilot Program

	KEY PERFORMANCE FACTORS							
	Quality Protection		**Cost of Packaging**	**New Process Operating Cost**	**Minimization of Plastics**	**Pak Cycle Time**	**Innovation**	
Goals (in priority order)	No more than 1% (project code items) returns under warranty	Zero Safety Problems Zero impact on readiness	(By end of program) Reduct-ion in overall Pak costs of 10% over current baseline to package military items	No increase in cost of O&M due to innovation for program code item	No increase in quantity of plastic materials over 3 years No decrease in marine degradable materials over 3 years	Reduce Pak cycle time by 10%	Tested innovations within 1 year reported to IPT that can be transferred 10% increase per year	Clear input of end user RQMB, lower hassle of Introducing Innovation, increase in items offered by DoD Pac specialist
Performance Measures	# of package failure results in part damage/failure	Survey of end-user satisfaction	Dollars	Track O&M costs trend for program code items	Vendor efforts to reduce plastics & increase degradables	Time	# of innovations submitted to DoD Log when submitted (briefing)	Survey of Vendor Personnel
Performance Drivers	Supply Discrepancies Reports Warranty Cards (DCMC, DLA, AMS)	Interview, Questionnaire or observation with immediate reporting	Calculate the difference be-tween baseline military packag-ing costs and pilot program military packag-ing costs. Report periodically as required	Surveys-sample incrementally to baseline & look for trends Report of survey Trends out of depots/Users on DD1225/364s	Visit every 6 months for observations & discussions Vendors report on actions taken	Baseline Log in/Log Out of current Mil Pak vs innovation Sampling done along with cost baseline	Review Log at IPT meetings	Survey prior to IPT meeting
Action Officer	F Local DCMC Rep will log R Industry Rep will review	F IPT Sub Team	F Local Vendor Site	PMCPs Roll up to IPT	F Frank Sechrist R Local Vendor Site	F Local Vendor Site	F Local Vendor Site	F IPT Sub Team

Rapid Improvement Teams: (One of Tools)

Teams will engage in the following actions:

- **The team leader focuses the team on its reform target,**
- **Each team attacks its reform target using the tools provided in the workshop,**
- **Coaches are available to assist with the process of implementing the change,**
- **Subject-matter experts are available to assist in weighing content decisions, and**
- **Each team reports its outcomes to its manager after 60 days.**

Achieving Success

- Track and Monitor Achievement (Special Project Codes)
- Utilize Senior Oversight for Evaluation and Transition
- Engage Stakeholders
- Obtain education, training and commitment to transition facilities and achieve best practices.
- Establish key milestone dates (30-60 days)

Statement of Global Objective

Commercial Packaging Pilot Program

The objective of the Commercial Packaging Pilot Program is to...

- Provide flexibility to innovative
- Accelerate and use best practices
- Deliver quality products
- Operate in a collaborative environment

Accomplishing this objective will require all stakeholders to oper in the spirit of...

- Cooperation
- Shared responsibility
- Open and timely communication
- Active Risk Management

Our objective in this pilot program is not to...

- Diminish performance
- Continue if no benefit is realized
- Eliminate DoD packaging expertise
- Shift risk and cost to end users
- Dismiss Mil Std 2073

Execution Plan

Commercial Packaging Pilot Program

- **Statement of global objective**
- **Specific goals and metrics (*the Scorecard)***
- **Guidelines for handling risk/exception issues**
- **Local implementation plan and procedures**
- **Requirements for reporting results and evaluating success**

2 day Workshop - Mission Accomplished

The Revolution in Business Affairs

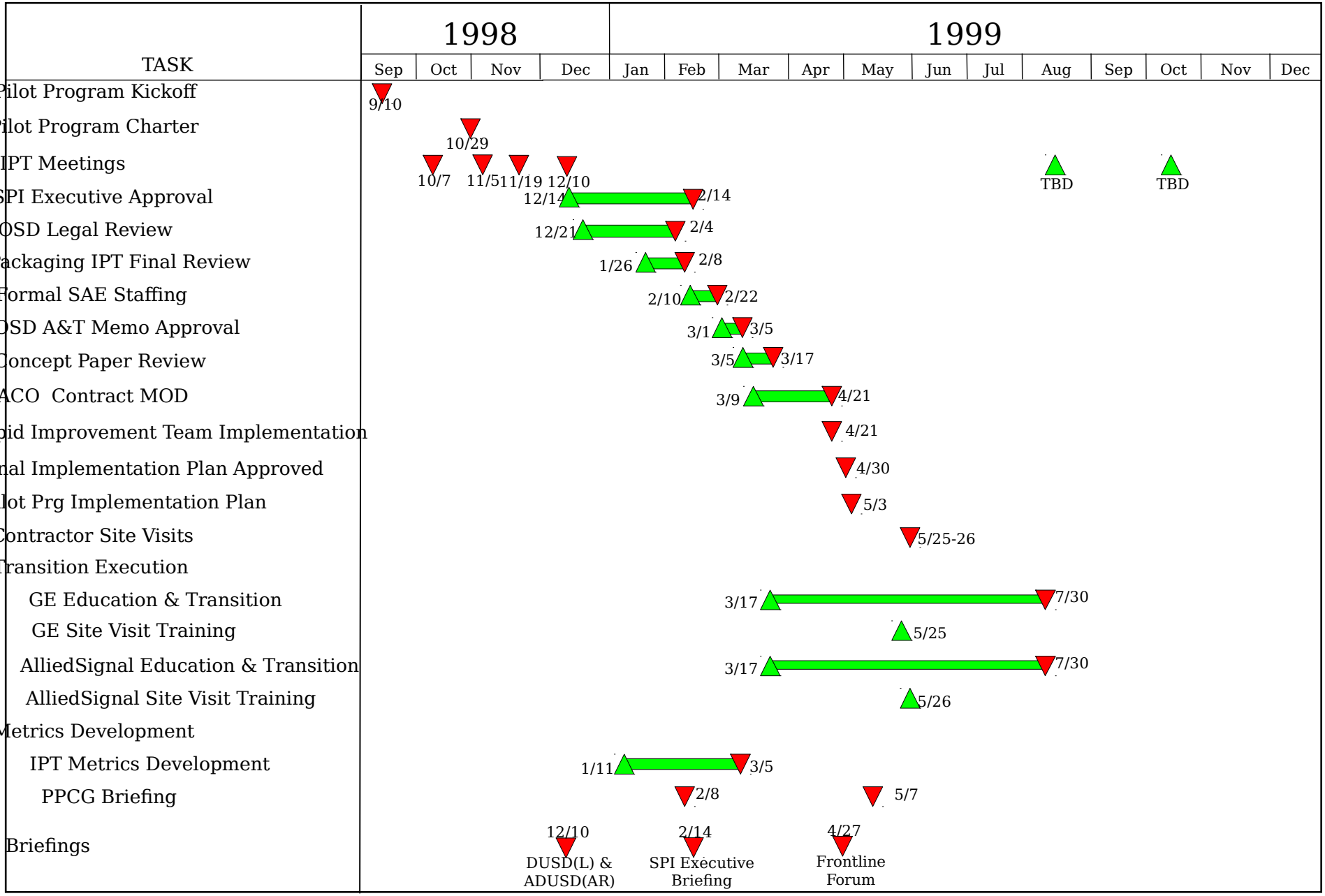
The rapid pace of technological change and the economics of warfighting have made the Defense business enterprise a critical component of winning wars.

How Do We Win the Revolution in Business Affairs?

- Committed and skilled leaders
- Tools for accelerating change
- Scorecards measuring success

Packaging Pilot Schedule

6/2/99



Leadership Required

- Encourage taking prudent risks to achieve better results.
- Insist that people openly share ideas, concerns, objectives, and recommendations without fear of retribution.
- Promote the use of best practices that produce better results.
- Sponsor cross-functional/cross-enterprise to accelerate and improve the quality of decision-making.

Commercial Packaging Pilot Program Implementation Plan Generation

- The Defense Contract Management Command (DCMC) will amend current DoD contracts at 5 General Electric (GE) locations
  - GE Aircraft Engines, Evendale, OH (Cage Code 07482)
  - GE Lynn, MA (Cage Code 99207)
  - GE Aviation Service, Strother, KS (Cage Code 24113)
  - GE Aviation Service, Ontario, CA (Cage Code 06858)
  - GE Engine Service, Cincinnati, OH (Cage Code 062W2)

  3 Allied Signal (AS) contractor locations
  - AS Engines, Phoenix, AZ (Cage Code 99193)
  - AS Aerospace Equipment Systems, Tempe, AZ (Cage Code 59364)
  - AS Aerospace Equipment Systems, Tempe, AZ (Cage Code 64547)
- The approved block change contract language, the implementation plan, and the GE and Allied Signal Concept Papers will be incorporated by DCMC

Where Have We Been in the Packaging Pilot Program!

- 10 Sept 98 GE and AlliedSignal designated as Pilots
- 29 Oct 98 Pilot Program Packaging Charter signed
- 14 Dec 98 SPI Executive Council briefed and Approval Received to Execute Pilot
- 08 Feb 99 Pilot Program Consulting Group (PPCG) briefed - major emphasis was on Metrics
- 22 Feb 99 Formal SAE Staffing
- 05 Mar 99 OSD A&T Memo and Block Change Language Approved by Dave Oliver
- 20-21 Apr 99 Rapid Improvement Team (RIT) meeting with Final Commercial Packaging Program Implementation Plan generated
- 3 May 99 Commercial Packaging Pilot Program Executed
- 25-27 May 99 Site Implementation RIT meeting

Rapid Improvement Team (RIT)

Commercial Packaging Pilot Program Implementation Plan for General Electric and AlliedSignal April 20-21, 1999

SPI Statistics
(Update 4/21/99)

							Objections:							Mod Time			Age, Open		
Process Type	**Qty**	**Mods**	**FAR**	**W/D**	**Open**	**Overage**	**AF**	**Army**	**Navy**	**NASA**	**DLA**	**DCMC**	**Esc**	**Avg**	**Sigma**	**CV**	**Avg**	**Sigma**	**CV**
Business-CostDataReporting	25	11	1	11	3	2	4	3	4	0	0	6	3	155	65	42%	439	382	87%
Business-Direct Billing	82	77	0	4	1	0	0	0	0	0	0	0	0	52	71	137%	85	171	202%
Business-Earned Value Mgmt System	30	27	4	2	1	0	0	0	0	0	0	0	0	132	95	72%	178	214	121%
Business-FARA/FASA	23	13	4	8	2	1	3	1	3	0	4	1	1	105	40	38%	251	214	85%
Business-General	90	60	22	23	7	2	5	7	4	1	0	2	3	149	94	63%	342	329	96%
Business-Govt Property	101	22	75	39	40	2	9	8	13	0	1	12	14	111	86	78%	651	357	55%
Business-Patent Reporting	9	5	2	2	2	1	1	1	2	0	0	0	2	132	25	19%	328	247	75%
Business-Reps & Certs	35	21	19	9	5	1	0	0	1	1	1	0	0	184	150	81%	430	384	89%
Business-Small Disadvantaged	16	11	7	3	2	0	0	0	0	2	0	0	1	143	171	120%	386	404	105%
Business-Subcontracting	59	40	14	13	6	2	1	0	2	2	1	2	3	150	96	64%	342	336	98%
Business-Subcontracting-ACO Consent	21	6	18	9	6	1	0	1	0	1	0	0	0	400	299	75%	663	325	49%
Business-Subcontracting-Enabling	17	17	0	0	0	0	0	0	0	0	0	0	1	162	75	47%	162	75	47%
Business-TINA	5	1	4	2	2	0	1	1	1	0	0	1	1	259			800	338	42%
Engineering-Audits	3	1	0	0	2	2	1	0	0	0	0	0	2	586			588	162	27%
Engineering-Configuration Mgmt	98	68	0	26	4	3	10	5	11	1	2	6	4	166	109	66%	346	328	95%
Engineering-Drawings	25	16	0	8	1	1	2	1	2	0	0	0	0	156	108	70%	332	297	90%
Engineering-General	19	10	0	5	4	2	0	1	0	0	1	0	1	146	60	41%	306	277	90%
Engineering-Management	8	6	0	2	0	0	0	1	0	0	0	0	0	94	41	44%	289	370	128%
Environmental-AP2I-J GAPP	11	8	0	1	2	2	0	0	0	0	0	0	0	56	37	66%	151	167	110%
Environmental-SPI	12	9	1	2	1	0	0	0	0	0	0	0	0	136	95	70%	247	225	91%
Logistics-General	19	12	0	6	1	0	0	0	0	0	0	0	0	123	54	44%	293	294	100%
Logistics-Marking	8	7	0	1	0	0	0	0	0	0	0	0	0	141	85	61%	229	263	115%
Logistics-Packaging	**49**	**23**	**0**	**14**	**12**	**9**	**3**	**8**	**9**	**0**	**3**	**6**	**9**	**167**	**175**	**105%**	**364**	**317**	**87%**
Logistics-Parts/Material Mgmt	56	45	2	8	3	1	0	1	1	0	1	2	2	182	112	62%	249	217	87%
Manufacturing-Electronic Fabrication	39	30	2	6	3	0	0	1	0	0	0	0	1	164	105	64%	249	270	109%
Manufacturing-ESD Protection	19	16	0	2	1	0	0	0	0	0	0	0	0	154	102	67%	198	207	105%
Manufacturing-General	50	38	0	10	2	0	1	3	1	1	2	0	2	117	82	71%	244	298	122%
Manufacturing-Management	23	20	0	3	0	0	0	0	0	0	0	0	1	147	62	43%	231	236	102%
Manufacturing-Painting/Coating	26	21	0	5	0	0	0	1	0	0	0	0	0	131	53	40%	219	216	98%
Manufacturing-Soldering/Welding	102	83	1	16	3	1	2	0	2	1	0	4	2	141	96	68%	248	286	115%
Manufacturing-Wiring	8	6	0	1	1	0	0	0	0	0	0	0	1	235	250	107%	247	253	102%
Quality System	140	122	0	13	5	4	0	0	1	3	0	1	3	129	67	52%	190	212	112%
Quality-Calibration	79	71	0	5	3	1	0	0	0	0	0	0	3	135	71	53%	183	203	111%
Quality-General/Multiple Processes	98	78	0	16	4	3	4	2	9	0	1	3	1	119	57	48%	223	263	118%
Quality-Inspection	58	47	1	7	4	3	2	2	3	0	0	0	4	123	99	81%	220	268	122%
Quality-Non Conforming Material/MRB	40	34	0	6	0	0	0	0	0	0	0	1	2	138	66	48%	245	275	112%
Quality-Supplier	31	24	0	5	2	2	0	0	0	0	0	0	4	146	67	46%	241	237	99%
Safety	17	15	1	1	1	0	0	0	0	0	0	1	0	213	141	66%	236	184	78%
Software	46	27	0	19	0	0	5	6	4	1	1	3	0	230	166	72%	497	371	75%
Testing	37	29	0	8	0	0	2	1	1	1	1	2	2	174	151	87%	272	261	96%
Total/Avg/Max/Min	1634	1177	178	321	136	46	56	55	74	15	19	53	73	141	104	74%	294	310	5%

Approved Packaging SPIs

(Update 4/21/99)

Contractor Facility	CAO	CAO POC	Mil/Fed Spec/Std	SPI Process	Acceptance (Mod) Date	PID
ABA Industries, Pinellas Park, FL	DCMC Cle	Gary LaFl	Individual Contract Packaging	MIL-STD-2073-1C, tailored Military Packaging star	35668	1330
AlliedSignal Aerospace Equipment Systems (AES), Tempe, AZ	DCMC Phc	Kathy Heal	Various Packaging, Handling,	MIL-STD-2073-1C/129M based Packaging and Ma	36245	1239
AlliedSignal Avionics, Olathe, KS	DCMC St.	Darlene Sc	MIL-SPEC Packaging	Commercial Packaging	35657	1107
AlliedSignal Engines, Phoenix, AZ	DCMC Phc	Steve Harc	MIL-STD-2073-1 & 2, MIL-E-1	Tailored MIL-STD-2073-1C Packaging requiremen	36241	424
Chromalloy Nevada, Carson City, NV	DCMC Sar	Melvin Koe	Mil-STD 2073, MIL-STD 116, (	Convert Pkg requirement from Mil Specifications t	35955	1753
Danville Metal Stamping Co, Danville, IL	DCMC Chi	Ernest Hei	Mil-STD-2073-2C, Packaging	Mil-STD-2073-1C, Packaging	36098	1932
Ferrotherm Company, Inc., Cleveland, OH	DCMC Cle	Betty Vanr	Military Specification Packagir	Standard Commercial Packaging	35285	269
Fuel Systems Textron, Zeeland, MI	DCMC Det	Marla Arm	Packaging contract requireme	Unique process based on commercial STDs	35482	773
L-3 Communications, Communications Systems-East, Camden, N	DCMC Loc	Frank Don	MIL-STD-1367A and other Va	ASTM-D3951-90	35390	533
Lockheed Martin Astronautics (LMA), Denver, CO	DCMC Loc	Capt Scott	MIL-STD-2073, -1189, MIL-HI	Packaging and Preservation Requirements	35837	1633
Lockheed Martin Tactical Aircraft Systems, Ft. Worth, TX	DCMC Loc	Viola Dear	MIL-STD-2073 & MIL-P-116	MIL-STD-2073-1C based Commercial Packaging F	35402	543
Northrop Grumman, St. Augustine, FL	DCMC Nor	Marjorie H	MIL-STD-2073/-129/-1189, Mi	ASTMD-3951, STD Commercial Packaging and Ba	35699	1247
Pratt & Whitney West Palm Beach, FL; East Hartford, CT	DCMC Pra	John Lehn	MIL-STD-2073	Update all military orders according to current MIL-	35710	644
Raytheon Electronic Systems, Bedford, MA	DCMC Ray	Steven Tit	MIL-STD-2073, Military Packa	Sample Test Seals/Utilize Labels/Waiver 30 Days	35839	1594
Raytheon Systems Co., Defense Systems Segment, Missile Syst	DCMC Ray	James Sch	MIL-STD-2073-1/2, -129L, -72	Eliminate Rqmt to use fire retardant Packaging foa	35696	1253

Objectives of the Pilot Program

- **Conduct a 3-year Pilot with GE/Allied Signal to:**
  - Allow GE/AS to develop a completely commercial packaging process and test its performance within the military distribution system
  - Expand application of Commercial Packaging for items intended to enter military distribution system
  - Develop lessons learned for application to Government packaging requirements
  - Develop, monitor, and review Government and Industry benefits, risk and cost savings

The first test of the Pilot Program will come in about 12 to 18 months when preliminary performance data will be thoroughly analyzed

What Is The Packaging Issue?

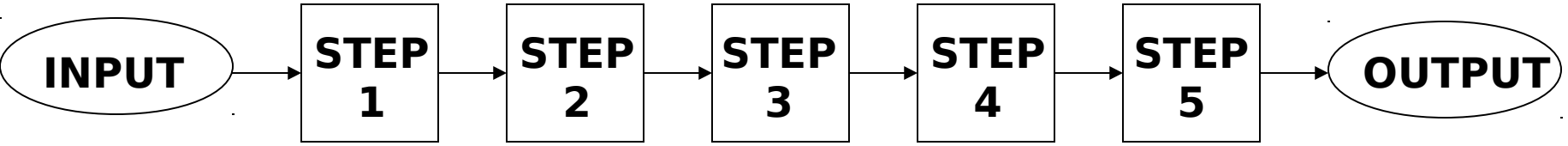
- Removing the Barrier:

  Optimal use of commercial packaging and full implementation of revised packaging specifications have not yet been fully implemented.

  Desired Outcomes:

  - Achieve mutual benefit, and identify opportunities for DoD to apply commercial/military packaging for specific applications
  - Achieve greater integration of commercial military processes
  - Improve open communication/understanding of packaging requirements between the Military Services, DCMC, DLA, and Industry

Process Roles and Responsibilities



PROCESS STEP	ROLES AND RESPONSIBILITIES							DECISION PROCESS
	DOD PAK Spec	Industry PAK Spec	DCMC PAK Specialist	DCMC QAR	ACOs	Pilot IPT	User	
1 Review, Verify & Understand PAK Performance Requirements	• Provide info • Open, honest • Represent end user accurately R	Review/Question Probe (as needed) Understand F	• Proactively reach out to DoD-understand req'ts (as needed) R				• Participate in the development of performance requirements I	CONSULTED
2 Find/Design Innovations in PAK Materials/Procedures	• Provide input on proposed design innovations ←→ * I	• Design Pack or Redesign Mil Pack • Communicate new design info F	• Stay informed of new decisions I	• Understand pack designs - stay informed I	• Understand pack designs - stay informed I			CONTROLLED
3 Implement Innovations	• Understand innovation • Leverage successes / share learnings I	• Pack to design w/ Proj Code F		• Ensure Compliance w/ contractor design I	• Ensure Compliance w/ contractor design I		• Understand Project Code + Pilot designs I	CONTROLLED
4 Feedback, Correction & Learning	• Understand performance • Provide input • Review performance requirements F	• Measure performance • Analyze RODs • Correct discrepancies • Revise designs/processes F	• Evaluate Pkg ROD R	• Evaluate RODs R	• Evaluate RODs • Resolve Issues • Analyze Metrics R	• Analyze performance • Communicate successes • Drive learning back to old positions I	• Provide RODs F	CONCENSUS
Behaviors to Avoid	• Don't assume everyone knows what you know about end user requirements	• Don't ever stop communicating and listening	• Don't become a bystander or a "checker"			• Don't fall	• Don't hesitate to report descrepancies	

* Need communication process